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**Title** : METAL ANALYSIS IN HAIR OF CALIFORNIA SEA LION PUPS (Zalophus californianus californianus, Lesson 1828) IN EIGHT ROOKERIES OF THE GULF OF CALIFORNIA, MEXICO.

**Category** : Ecology

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**Abstract** : The California sea lion (Zalophus californianus californianus) is a permanent resident on islands along the Gulf of California, it is a high trophic level predator, showing high metabolism, high philopatry and moderate longevity, which makes this mammal, a good regional bio-indicator of environmental conditions. Based on this premise, we addressed the analysis of mercury, selenium, lead, iron, zinc, and copper, in hair of sea lion pups, to monitor regional conditions. During June 1997, a total of 199 hair samples was collected in 8 rookeries: Los Islotes, San Pedro Mártir, San Esteban, Los Cantiles, Isla Granito, Isla Lobos, San Jorge y Consag. The samples were digested and analyzed in an atomic absorption spectrophotometer at the Facultad de Medicina Veterinaria y Zootecnia, UNAM. The metal concentrations showed latitudinal changes, probably associated with feeding habits. For example San Pedro Mártir and San Esteban colonies showed the highest copper levels, probably associated to intense predation of squid (Enoploteuthidae) known for having high levels of this metal in the blood. The mercury levels among rookeries showed a clear positive correlation with trophic level, calculated from feeding habits (based on the Pauly algorithm). This work corroborated the positive relationship between mercury and selenium, already reported by other authors.